



## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet Recombinant Porcine Interleukin-2

**Catalog No.**  
228-10900

**Source:**  
*Escherichia Coli.*

### **Synonyms**

T-cell growth factor (TCGF), Aldesleukin, Lymphokine, IL-2.

### **Introduction**

IL2 is a secreted cytokine that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine is a heterotrimeric protein complex whose gamma chain is also shared by interleukin 4 (IL4) and interleukin 7 (IL7). The expression of this gene in mature thymocytes is monoallelic, which represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests an essential role of this gene in the immune response to antigenic stimuli.

### **Description**

Interleukin2 Porcine Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 134 amino acids and having a molecular mass of 15217 Dalton.  
The IL-2 is purified by proprietary chromatographic techniques.

### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

### **Formulation**

The protein (1mg/ml) was lyophilized containing no additives.

### **Solubility**

It is recommended to reconstitute the lyophilized Interferon 2 in sterile 20mM AcOH not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### **Stability**

Lyophilized IL2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-2 should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### ***Purity***

Greater than 95.0% as determined by (a) Analysis by RP-HPLC.  
(b) Analysis by SDS-PAGE.

### ***Amino acid sequence***

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ala-Pro-Thr-Ser.

### ***Biological Activity***

The ED<sub>50</sub> as determined by the dose-dependant murine CTLL cells proliferation assay with MTS detection is < 0.1 ng/ml, corresponding to a Specific Activity of 10 MIU/mg.

### ***Protein content***

Protein quantitation was carried out by two independent methods 1. UV spectroscopy at 280 nm using the absorbency value of 0.714 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).  
2. Analysis by RP-HPLC, using a calibrated solution of IL-2 as a Reference Standard.

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